



# ***OSHA LEAD STANDARDS***

# ***GENERAL INDUSTRY LEAD STANDARD***



## ***29 CFR 1910.1025***

### **◆ SCOPE AND APPLICATION**

- Applies to all occupational exposure to lead except:
  - ◆ construction
  - ◆ agriculture

# ***SELECTED DEFINITIONS***



- ◆ **ACTION LEVEL  
(AL)**

- $30 \mu\text{g}/\text{m}^3$

- ◆ **PERMISSIBLE EXPOSURE LIMIT  
(PEL)**

- $50 \mu\text{g}/\text{m}^3$

# ***SELECTED DEFINITIONS***



- ◆ **ALLOWABLE EXPOSURE**  
(in  $\mu\text{g}/\text{m}^3$ )

400



# hours worked

# ***EXPOSURE ASSESSMENT***



## ◆ **INITIAL DETERMINATION**

- To determine whether employees are exposed at above the action level
- May rely on historical data

# ***EXPOSURE ASSESSMENT***



## ◆ **NEGATIVE INITIAL DETERMINATION**

- No exposure at or above the action level
- Additional monitoring is not required unless there is a change in:
  - ❖ equipment, process, control, personnel or task resulting in levels at or above the action level
- Document

# ***EXPOSURE ASSESSMENT***

## ◆ **POSITIVE INITIAL DETERMINATION**



- Exposure at or above the AL and below the PEL
  - ◆ Conduct monitoring representative of each exposed employee
- May use historical data
- Additional monitoring - every 6 months
- Document

# ***EXPOSURE ASSESSMENT***

## ◆ **POSITIVE INITIAL DETERMINATION**



- Exposure at or above the PEL
  - ◆ Conduct monitoring representative of each exposed employee
- May use historical data
- Additional monitoring - every 3 months
- Document



# ***METHODS OF COMPLIANCE***



- ◆ **Exposures > PEL for more than 30 days per year**
  - Engineering Controls
  - Work Practice Controls

# ***RESPIRATORY PROTECTION***



## ◆ **REQUIRED:**

- while engineering and work practice controls are being installed or implemented
- during activities when engineering and work practice controls are not feasible
- where engineering and work practice controls are not feasible to reduce exposures below PEL

# ***RESPIRATORY PROTECTION***



- ◆ **Must be provided whenever an employee requests a respirator.**

# ***RESPIRATORY PROTECTION***



- ◆ **Must provide a PAPR whenever an employee requests one and it is protective against the level of exposure.**

# ***EXPOSURE > PEL***



- ◆ **Respiratory protection**
- ◆ **Personal protective equipment**
- ◆ **Change rooms**
- ◆ **Showers** (where feasible in construction)
- ◆ **Eating facilities**
- ◆ **Hand washing facilities**

# ***HOUSEKEEPING***



- ◆ **Maintain surfaces as free as practicable of lead accumulation.**

# ***MEDICAL SURVEILLANCE***



- ◆ **Exposure > AL for more than 30 days per year**
  - Medical exam
  - Biological monitoring

# ***MEDICAL REMOVAL***



- ♦ **Average of last three blood lead levels  $\geq 50 \mu\text{g/dL}$**
- ♦ **Average of blood lead levels over the past 6 months  $\geq 50 \mu\text{g/dL}$**
- ♦ **Return**
- ♦ **Benefits**



# ***EMPLOYEE TRAINING (within 180 days)***



- ◆ **REQUIRED:**

- EXPOSURE  $\geq$  AL
- ANNUALLY

# ***RECORDKEEPING***



## ◆ **EXPOSURE DATA AND MEDICAL SURVEILLANCE**

- 40 years or duration of employment plus 20 years

## ◆ **MEDICAL REMOVAL**

- At least duration of employment